

SIPTOX: Spider Toxin Database Information Repository System of Protein Toxins from Spiders by Using MySQL Method

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Abstract : Spider produces a special kind of substance. This special kind of substance is called a toxin. The toxin is composed of many types of protein, which differs from species to species. Spider toxin consists of several proteins and non-proteins that include various categories of toxins like myotoxin, neurotoxin, cardiotoxin, dendrotoxin, haemorrhagins, and fibrinolytic enzyme. Protein Sequence information with references of toxins was derived from literature and public databases. From the previous findings, the Spider toxin would be the best choice to treat different types of tumors and cancer. There are many therapeutic regimes, which causes more side effects than treatment hence a different approach must be adopted for the treatment of cancer. The combinations of drugs are being encouraged, and dramatic outcomes are reported. Spider toxin is one of the natural cytotoxic compounds. Hence, it is being used to treat different types of tumors; especially its positive effect on breast cancer is being reported during the last few decades. The efficacy of this database is that it can provide a user-friendly interface for users to retrieve the information about Spiders, toxin and toxin protein of different Spiders species. SPIDTOXD provides a single source information about spider toxins, which will be useful for pharmacologists, neuroscientists, toxicologists, medicinal chemists. The well-ordered and accessible web interface allows users to explore the detail information of Spider and toxin proteins. It includes common name, scientific name, entry id, entry name, protein name and length of the protein sequence. The utility of this database is that it can provide a user-friendly interface for users to retrieve the information about Spider, toxin and toxin protein of different Spider species. The database interfaces will satisfy the demands of the scientific community by providing in-depth knowledge about Spider and its toxin. We have adopted the methodology by using A MySQL and PHP and for designing, we used the Smart Draw. The users can thus navigate from one section to another, depending on the field of interest of the user. This database contains a wealth of information on species, toxins, and clinical data, etc. This database will be useful for the scientific community, basic researchers and those interested in potential pharmaceutical Industry.

Keywords : siptoxd, php, mysql, toxin

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